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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,590	12/09/2004	Kazumasa Harada	448563/0266	1824
26610	7590	11/20/2006	EXAMINER	
STROOCK & STROOCK & LAVAN LLP			VO, ANH T N	
180 MAIDEN LANE			ART UNIT	
NEW YORK, NY 10038			PAPER NUMBER	
			2861	

DATE MAILED: 11/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/517,590

Applicant(s)

HARADA ET AL.

Examiner

Anh T.N. Vo

Art Unit

2861

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 7-10, 14 and 15 is/are rejected.
- 7) ☒ Claim(s) 4-6 and 11-13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 12/09/2004.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Acknowledgement is made of the receipt of Preliminary Amendment filed 12 September 2004.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The references cited on PTO 1449 have been considered.

Claim Rejections

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior arts are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 7-10 and 14-15 are rejected under 35 USC 103 (a) as being unpatentable over Matsumoto et al. (US Pat. 6,460,984) in view of Shinada et al. (US Pat. 6,332,481).

Matsumoto et al. disclose, in Figures 1-3A, 24 and 25A, a liquid supply system comprising:

Art Unit: 2861

- a container body (53), in which ink is storable including an ink supply port (52) engageable with an ink supply needle (71 or 471) communicating with a recording head (60) in a recording apparatus, so that the ink is supplied to said recording head (60) when said ink cartridge (50) is mounted in a mounting portion (11) (Figures 1 and 24);
 - a retaining member (80) formed on a first wall surface of said container body (53) and having a projected portion (81) engageable with an engaging portion (8) formed in said mounting portion (11) (Figures 1 and 24);
 - a pressed portion (82) is formed on a second wall surface of said container body (53) opposed to said first wall surface, an upper surface of said pressed portion (82) being pressed by a member (84) of said recording apparatus (30) (Figure 1); and
- wherein a valve device (57) is provided in said ink supply port (52).

However, Matsumoto et al. do not disclose a valve device having a biasing member that is provided in said ink supply port, said biasing member is configured to normally keep closing said valve device, and when said ink supply needle is inserted to said ink supply port, said valve device is opened against said biasing member; wherein said valve device includes a valve body and a coil spring; wherein said valve device includes a sealing member for resiliently abutting a surrounding of said ink supply needle, a valve body brought into contact with said sealing member and said biasing member for pressing said valve body to said sealing member; and wherein said biasing member is provided with an elastic force such that said container body is moved in a direction, opposed to an insertion direction against a friction force between said sealing member and said ink supply needle.

Shinada et al. disclose, in Figures 1, 3A-3B and 9, an ink cartridge being mounted on a recording apparatus comprising:

- a valve device (10, 11, 13) having a biasing member (13) is provided in said ink supply port (3), said biasing member (13) is configured to normally keep closing said valve device (10, 11, 13) (Figure 3A), and when said ink supply needle (5 or 21) is inserted to said ink supply port (3), said valve device (10, 11, 13) is opened against said biasing member (13) (Figures 1 and 3A);

Art Unit: 2861

- wherein said valve device (10, 11, 13) includes a valve body (11) and a coil spring (13) (Figure 3A);
- wherein said valve device (10, 11, 13) includes a sealing member (10) for resiliently abutting a surrounding of said ink supply needle (5 or 21), a valve body (11) brought into contact with said sealing member (10) and said biasing member (13) for pressing said valve body (11) to said sealing member (10) (Figures 1 and 3A-3B); and
- wherein said biasing member (13) is provided with an elastic force such that said container body (1) is moved in a direction, opposed to an insertion direction against a friction force between said sealing member (10) and said ink supply needle (5).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to incorporate the teaching of Shinada et al. in the Matsumoto et al. liquid supply system for the purpose of providing a valve to open/close an ink supply port.

Citation of Pertinent Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. These prior art references (US Pat. 5,777,646; US Pat. 6,863,388) cited in the PTO 892 form show an ink supply system, which is deemed to be relevant to the present invention. These references should be reviewed.

Allowable Subject Matter

Claims 4 and 11 would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims. These claims would be allowable because the prior art references of record fails to suggest a container body that is provided with a projected portion for a stopper capable of pivoting a retaining member of an ink cartridge such that a projected portion of retaining member is detachable from a mounting portion in the combination as claimed.

Art Unit: 2861

Claims 5 and 12 would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims. These claims would be allowable because the prior art references of record fails to suggest a biasing member of a valve device that is provided with a length and an elastic force such that the biasing member moves a claw portion of a retaining member of an ink cartridge to outside of a recessed portion when an engagement between the retaining member and the mounting portion is released in the combination as claimed.

Claims 6 and 13 would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims. These claims would be allowable because the prior art references of record fails to suggest a stress that is provided by a biasing member of a valve device being set to a range of 200g through 700g when said cartridge is mounted in the combination as claimed.

CONCLUSION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Anh Vo whose telephone number is (571) 272-2262. The examiner can normally be reached on Tuesday to Friday from 9:00 A.M. to 7:00 P.M..

The fax number of this Group 2861 is (571) 273-8300.



ANH T.N. VO
PRIMARY EXAMINER
November 10, 2006